

## Patent Abstracts of Japan

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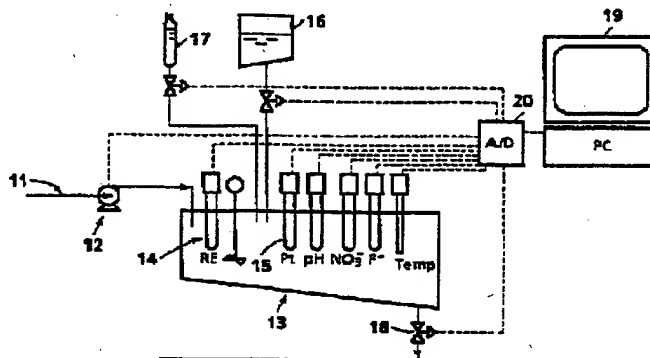
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APPLICANT : MITSUBISHI HEAVY IND LTD;

INVENTOR : KANDA YUKIO;

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TITLE : MEASURING DEVICE FOR IRON ION  
CONCENTRATION IN PICKLING  
SOLUTION



**ABSTRACT :** PURPOSE: To provide a measuring device for iron ion concentration in pickling solution which is applied to a device for continuously pickling a stainless steel band.

CONSTITUTION: This measuring device has 1) a device for supplying a pickling solution from a pickling line 11 to a flow cell 13 in a fixed quantity through a constant pump 12, 2) a device 16 for diluting the pickling solution in the flow cell 13 with pure water into an optional dilution, 3) a device 17 for automatically dropping an oxidizing agent to the diluted pickling solution in the flow cell, 4) an A/D converter 20 for oxidation-reduction potential and monitoring thereof which is set in the flow cell 13 to measure the change of the oxidation-reduction potential in each operation of the above 1)-3), and 5) an arithmetic device 19 for calculating iron ion concentration from the oxidizing agent titre when the oxidation-reduction potential begins to sharply change in the operation of 3), each oxidation-reduction potential of 1)-3), and the dilution in 2).

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